IDENTIFICATION OF DRUGS AND DRUG TARGETS BY DETECTION OF THE STRESS RESPONSE

ABSTRACT OF THE DISCLOSURE

The invention features methods of high throughput screening of candidate drug agents and rapid identification of drug targets by examining induction of the stress response in a host cell, *e.g.*, the stress response in wildtype host cells and/or in host cells that differ in target gene product dosage (*e.g.*, host cells that have two copies of a drug target gene product-encoding sequence relative to one copy). In general, induction of the stress response in wildtype host cells indicates that a candidate agent has activity of the drug. Induction of a relatively lower or undetectable stress response in a host cell comprising an alteration in gene product dosage indicates that the host cell is drug-sensitive and is altered in a gene product that plays a role in resistance to the drug.

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